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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/803,289      | 03/18/2004  | Bryan Hornung        | 10961397-4          | 5702             |

7590 03/09/2006

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
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| EXAMINER |
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FLOURNOY, HORACE L

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| ART UNIT | PAPER NUMBER |
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2189

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                       |                                       |  |
|------------------------------|---------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/803,289  | <b>Applicant(s)</b><br>HORNUNG ET AL. |  |
|                              | <b>Examiner</b><br>Horace L. Flournoy | <b>Art Unit</b><br>2189               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7-10, and 16-18 is/are rejected.
- 7) ☒ Claim(s) 2-6 and 11-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/18/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

The instant application having Application No. **10/803,289** has a total of 20 claims pending in the application; there are 3 independent claims and 17 dependent claims, all of which are ready for examination by the examiner.

### **INFORMATION CONCERNING OATH/DECLARATION**

#### ***Oath/Declaration***

The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63**.

### **STATUS OF CLAIM FOR PRIORITY IN THE APPLICATION**

As required by **M.P.E.P. 201.14(c)**, acknowledgement is made of applicant's claim for priority under *35 U.S.C. 120* based on an application filed on January 31, 1997 (copending application number 08/797,674)

### **ACKNOWLEDGEMENT OF REFERENCES CITED BY APPLICANT**

As required by **M.P.E.P. 609(c)**, the applicant's submission of the Information Disclosure Statement dated **05/23/2005** is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by **M.P.E.P. 609(c)**, a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

**REJECTIONS NOT BASED ON PRIOR ART*****Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claim 18** is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 11 of U.S. Patent No. 6,718,375 in view of **Baxter et al. (U.S Patent No. 5,887,146 hereafter referred to as Baxter)**.

Baxter teaches the use of a controller for managing multiple response and request packets using a table to maintain information data about the individual packets. Therefore, the applicants limitations are obvious in view of Baxter for the limitations stated below.

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**Claim 11 of 6,718,375 teaches:**

*"A controller for managing a plurality of response packets and a plurality of request packets between interconnection ring of a multi-node processor system and at least one memory access controller,"*

**as well as:**

*"...a request activation queue for storing information until said interconnection ring is accessible; and a response activation queue for storing response information until the at least one memory access controller is accessible."*

**Each of the above limitations is claimed by the applicant but anticipated by U.S. Patent Number 6,718,375.**

**Claim 11 of 6,718,375 does not teach:**

*"the controller comprising: a table structure for storing, for each respective packet, an entry state that defines current status information, a flow type that define a transaction being performed by the controller, master identification information that identifies an originator, transaction identification information defined by a respective originator;"*

**Baxter teaches:**

*"...~~means for~~ storing a table entry state which defines a current status of a entry of the plurality of entries; [Baxter discloses this limitation e.g. in column 24, line 24-column 25, line 25] ~~means for~~ storing a flow type which defines a transaction being performed by the controller with the particular packet; [Baxter discloses this limitation e.g. in FIG. 6. See the column labeled "Type"] ~~means for~~ storing a master identification which designates an originator of the packet; [Baxter discloses this limitation e.g. in column 34, lines 22-31] and*

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*means for storing a transaction identification which designates the packet for the originator; [Baxter discloses this limitation e.g. in FIG. 6. See the column labeled "Decode Looks for:"] wherein the information stored in the table is used by the controller to direct its operations."*

It would have been obvious to include the teaching of Baxter because Baxter anticipates these limitations in the motivation found in column 7, lines 15-20, "Features of the invention include a highly efficient, high performance multiprocessor distributed memory system implemented with a high speed, high bandwidth, extensible system interconnect that has up to four busses available for multiprocessor communication."

## REJECTIONS BASED ON PRIOR ART

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1, 7-10 and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Baxter et al. (U.S Patent No. 5,887,146 hereafter referred to as Baxter).**

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With respect to independent **claims 1, and 10,**

*“A controller [disclosed, e.g. in FIG. 2 of Baxter] for managing a plurality of response packets and a plurality of request packets [Baxter teaches this limitation, e.g. in column 19, lines 40-43 and column 20, lines 31-45] between interconnection rings [Baxter teaches in column 1, 62-65, “CCNUMA machines consist of a number of processing nodes connected through a high bandwidth, low latency interconnection network.” The examiner interprets this teaching as analogous to “interconnection rings”] and at least one memory access controller, [Baxter discloses a memory controller, element 220 of FIG. 9. Also see associated text in the specification] the controller includes a table with a plurality of entries, [Baxter discloses “Header and Directory Decode Module (MC-HD)” in column 39, line 60 – column 40, line 29] each entry maintains a register of information about a particular packet from the plurality of response packets and the plurality of request packets, the table comprises:”*

According to the applicant's specification in paragraph [0035] the Examiner notes that the means or system/structure (“SCI Table 204”) for practice of the invention disclosed in the following limitation of Claim 1, is further taught in **Baxter as follows:**

*“...means for storing a table entry state which defines a current status of a entry of the plurality of entries; [Baxter discloses this limitation e.g. in column 24, line 24-column 25, line 25] means for storing a flow type which defines a transaction being performed by the controller with the particular packet; [Baxter*

discloses this limitation e.g. in FIG. 6. See the column labeled "Type"] ~~means for~~ storing a master identification which designates an originator of the packet; [Baxter discloses this limitation e.g. in column 34, lines 22-31] and ~~means for~~ storing a transaction identification which designates the packet for the originator; [Baxter discloses this limitation e.g. in FIG. 6. See the column labeled "Decode Looks for:"] wherein the information stored in the table is used by the controller to direct its operations."

With respect to **claims 7 and 16,**

"The controller of claim 6 further comprising: ~~means for~~ constructing request packets from the request information." [According to the applicant's specification in paragraph [0006], the Examiner notes that the means or system/structure ("request activation queue") for practice of the invention disclosed in the preceding limitation of Claim 8, is further taught in Baxter in column 4, lines 10-13]

With respect to **claims 8 and 17,**

"The controller of claim 6 further comprising: ~~means for~~ constructing response packets from the response information." [According to the applicant's specification in paragraph [0007], the Examiner notes that the means or system/structure ("response activation queue") for practice of the



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invention disclosed in the preceding limitation of Claim 8, is further taught in Baxter in column 4, lines 10-13]

With respect to **claim 9**,

*"The controller of claim 6 wherein said controller implements a Scalable Coherent Interface (SCI) protocol."* [Baxter teaches this in column 4, lines 6-10]

#### **Allowable Subject Matter**

**Claims 2-6 and 11-15** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### **CONCLUSION**

#### **Direction of Future Correspondences**

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Horace L. Flournoy whose telephone number is (571)

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272-2705. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:30 PM (ET).

**Important Note**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald G. Bragdon can be reached on (571) 272-4204. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 746-7239.

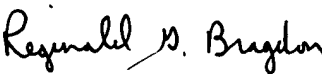
Information regarding the status of an Application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Horace L. Flournoy

Patent Examiner

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REGINALD G. BRAGDON  
SUPERVISORY EXAMINER

Supervisory Patent Examiner

Technology Center 2100